

WHAT IS CLAIMED IS:

1 1. A method for determining whether a subject has or is predisposed for a
2 mood disorder, the method comprising the steps of:

3 (i) obtaining a biological sample from a subject;

4 (ii) contacting the sample with a reagent that selectively associates with a
5 polynucleotide or polypeptide encoded by a nucleic acid that hybridizes under stringent
6 conditions to a nucleotide sequence of Table 2, 3, or 4; and

7 (iii) detecting the level of reagent that selectively associates with the sample,
8 thereby determining whether the subject has or is predisposed for a mood disorder.

1 2. The method of claim 1, wherein the reagent is an antibody.

1 3. The method of claim 1, wherein the reagent is a nucleic acid.

1 4. The method of claim 1, wherein the reagent associates with a
2 polynucleotide.

1 5. The method of claim 1, wherein the reagent associates with a
2 polypeptide.

1 6. The method of claim 1, wherein the level of reagent that associates
2 with the sample is different from a level associated with humans without a mood disorder.

1 7. The method of claim 1, wherein the biological sample is obtained from
2 amniotic fluid.

1 8. The method of claim 1, wherein the mood disorder is selected from the
2 group consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.

1 9. The method of claim 6, wherein the level of reagent that associates
2 with the sample is higher than a level associated with humans without a mood disorder.

1 10. The method of claim 6, wherein the level of reagent that associates
2 with the sample is lower than a level associated with humans without a mood disorder.

1 11. A method of identifying a compound for treatment or prevention of a
2 mood disorder, the method comprising the steps of:

3 (i) contacting the compound with a polypeptide, the polypeptide encoded by a
4 polynucleotide that hybridizes under stringent conditions to a nucleic acid sequence
5 comprising a nucleotide sequence of Table 2, 3, or 4; and
6 (ii) determining the functional effect of the compound upon the polypeptide,
7 thereby identifying a compound for treatment or prevention of a mood disorder.

1 12. The method of claim 11, wherein the contacting step is performed *in*
2 *vitro*.

1 13. The method of claim 11, wherein the polypeptide is expressed in a cell
2 and the cell is contacted with the compound.

1 14. The method of claim 11, the mood disorder is selected from the group
2 consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.

1 15. The method of claim 11, further comprising administering the
2 compound to an animal and determining the effect on the animal.

1 16. The method of claim 15, wherein the determining step comprises
2 testing the animal's mental function.

1 17. A method of identifying a compound for treatment of a mood disorder
2 in a subject, the method comprising the steps of:

3 (i) contacting the compound to a cell, the cell comprising a polynucleotide that
4 hybridizes under stringent conditions to a nucleotide sequence of Table 2, 3, or 4; and
5 (ii) selecting a compound that modulates expression of the polynucleotide,
6 thereby identifying a compound for treatment of a mood disorder.

1 18. The method of claim 17, wherein the expression of the polynucleotide
2 is enhanced.

1 19. The method of claim 17, wherein the expression of the polynucleotide
2 is decreased.

1 20. The method of claim 17, further comprising administering the
2 compound to an animal and determining the effect on the animal.

1 21. The method of claim 20, wherein the determining step comprises
2 testing the animal's mental function.

1 22. The method of claim 17, wherein the mood disorder is selected from
2 the group consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.

1 23. A method of treating a mood disorder in a subject, the method
2 comprising the step of administering to the subject a therapeutically effective amount of a
3 compound identified using the method of claim 11 or claim 17.

1 24. The method of claim 23, wherein the mood disorder is selected from
2 the group consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.

1 25. The method of claim 23, wherein the compound is a small organic
2 molecule.

1 26. A method of treating a mood disorder in a subject, the method
2 comprising the step of administering to the subject a therapeutically effective amount of a
3 polypeptide, the polypeptide encoded by a polynucleotide that hybridizes under stringent
4 conditions to a nucleotide sequence of Table 2, 3, or 4.

1 27. The method of claim 26, wherein the mood disorder is selected from
2 the group consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.

1 28. A method of treating a mood disorder in a subject, the method
2 comprising the step of administering to the subject a therapeutically effective amount of a
3 nucleic acid, wherein the nucleic acid hybridizes under stringent conditions to a nucleotide
4 sequence of Table 2, 3, or 4.

1 29. The method of claim 28, wherein the mood disorder is selected from
2 the group consisting of bipolar disorder I, bipolar disorder II, and major depression disorder.